

## Virtual and Digital Libraries

Today, we are living in the age of Information Technology (IT). The storage and retrieval of information has taken various forms and formats like on-line databases, microfilm / fiche, telecommunications facilities, videotext etc. Now, a modern library has to provide a package of many related services with the help of computer networking which enable the interlinking of libraries and information centers to pool resources and services irrespective of their physical location (SUNIL KUMAR, 2001).

Library operations today are also entirely different from what we have experienced in the past and we can expect a tremendous change in the future. These changes may affect almost all the fields of library organization and library management. The librarian and the library users must be ready to accept and adopt the new technologies; otherwise they will be pushed aside. Electronic library or digital library is the product of the technological development which enriched the field of library and information science and the accessories we use in these libraries are CD-ROM, DVD, floppy disks, multimedia computers etc. and now the Internet.

The information explosion can be faced only by the application of IT and networks in libraries. We see traffic jam sometimes on the networks because of user explosion. Data Traffic will be more than Voice Traffic on the telecommunication infrastructure. Now Chat Services or Video Conferencing is possible sitting in several countries. IT has an important role in library management (JAINAMMA, 2000). Further, we live in an era of technological revolution. New tools and instruments are designed and marketed in the field of communications and mass media. Library profession should use these technical aids such as telecommunications, computers and information technology in the provision of library service to convey useful information to the people in the Third World Societies (SARADA, 2000).

If IT is not required, then the society becomes handicapped because the socio-economic development of a nation depends upon the availability of adequate infrastructure to access the modern information (comprehensive, worldwide and up-to-date), which is an essential ingredient for day-to-day decision-making process. A democracy survives only on the Oxygen of Information (KANAKACHARY, 1995).

Keeping this in mind, the remaining of this paper attempts to describe one of the emerging types of libraries Virtual Library.

The characteristics that make interactive multimedia attractive for teaching purposes and reference tools are also what help to make them accessible and easy to use by a variety of users. Virtual libraries rely on interactivity to allow patrons to explore sites and to use resources. While the terms Virtual library and Digital library are used interchangeably, they are in fact not the same thing. A digital library consists of a networked collection of multimedia information typically available in one location, while a virtual library comprises a set of links to various resources on the Internet, such as documents, software or databases. The links in a virtual library are transparent to users and it provides them with one interface to information. (KAWATRA, 2000)

### **Features of a VL:**

- Provides speedy and wide access to updated information in a global manner.
- It has changed the traditional library system of cataloguing only book materials. Cataloguing of NBM (Non Book Materials) includes not only databases but also websites.
- Greater emphasis is on access and not on collection.
- Time saving
- It results in a creation of digital divide because only developed countries with strong funds for automation and fulfilling infrastructural requirements for VL can afford to support VL services. (CHIWEZA, 2006)

A brief listing of some of the Virtual libraries has also been given for reference. This list is only indicative.

### **Virtual library (<http://vlib.org>)**

<u>Agriculture</u>	<a href="http://vlib.org/Agriculture">http://vlib.org/Agriculture</a>
<u>The Arts</u>	<a href="http://vlib.org/Art">http://vlib.org/Art</a>
<u>Business and Economics</u>	<a href="http://vlib.org/BusinessEconomics">http://vlib.org/BusinessEconomics</a>
<u>Communications and Media</u>	<a href="http://vlib.org/Communication">http://vlib.org/Communication</a>
<u>Computing and Computer Science</u>	<a href="http://vlib.org/Computing">http://vlib.org/Computing</a>
<u>Education</u>	<a href="http://vlib.org/Education">http://vlib.org/Education</a>
<u>Engineering</u>	<a href="http://vlib.org/Engineering">http://vlib.org/Engineering</a>
<u>Humanities and Humanistic Studies</u>	<a href="http://vlib.org/Humanities">http://vlib.org/Humanities</a>
<u>Information and Libraries</u>	<a href="http://vlib.org/InformationManagement">http://vlib.org/InformationManagement</a>
<u>International Affairs</u>	<a href="http://vlib.org/InternationalAffairs">http://vlib.org/InternationalAffairs</a>
<u>Law</u>	<a href="http://vlib.org/Law">http://vlib.org/Law</a>
<u>Natural Sciences and Mathematics</u>	<a href="http://vlib.org/Science">http://vlib.org/Science</a>
<u>Recreation</u>	<a href="http://vlib.org/Recreation">http://vlib.org/Recreation</a>
<u>Regional Studies</u>	<a href="http://vlib.org/Regional">http://vlib.org/Regional</a>
<u>Social &amp; Behavioral Sciences</u>	<a href="http://vlib.org/SocialSciences">http://vlib.org/SocialSciences</a>
<u>Society</u>	<a href="http://vlib.org/Society">http://vlib.org/Society</a>

**Intute (<http://www.intute.ac.uk>)**: Intute is a free online service providing resources on Science & Technology, Arts & Humanities, Social Sciences and Health & Life Sciences). Formerly it was EEVL (Internet Guide to Engineering, Mathematics and Computing <http://www.eevl.ac.uk/>)

### **National Institute of Science & Technology (NIST) Virtual library**

**(<http://nvl.nist.gov/index.cfm>)**: The database offers General Research and Search by Subject features. . NIST's Engineering areas of research include: chemical, manufacturing, electrical, and civil engineering.

### **Thailand WWW Virtual Library ([www.nectec.or.th/WWW-VL-Thailand.html](http://www.nectec.or.th/WWW-VL-Thailand.html))**

This World Wide Web Virtual Library is sponsored by the National Electronics and Computer Technology Center (NECTEC) of the Royal Thai Government. It includes links to resources on Education, Health Care, Social Sciences, Economy, Science and Technology.

## **The Virtual Library of Resources About Engineering**

**(<http://ace-mentor-dc.org/VirtualLibrary>)**: the Virtual Library of Resources about Engineering contains a wealth of Internet links to resources of interest to engineering students. The resources are divided into the following categories:

- Organizational Resources
- Diversity/Minorities/Women Resources
- Federal Government Resources
- Educational Organizations and University Resources and Courses

**Digital Book Index (<http://www.digitalbookindex.org/about.htm>)**: Digital Book Index provides links to more than 130,000 title records from more than 1800 commercial and non-commercial publishers, universities, and various private sites. About 90,000 of these books, texts, and documents are available free, while many others are available at very modest cost.

**Historical Text Archive (<http://historicaltextarchive.com>)** provides access to quality articles, books, essays, documents, historical photos and links on a broad range of historical subjects.

**The Online Books Page (<http://onlinebooks.library.upenn.edu/>)**: The Online Books Page is a website that facilitates access to books that are freely readable over the Internet. It also aims to encourage the development of such online books, for the benefit and edification of all.

Major parts of the site include:

- [An index of thousands of online books freely readable on the Internet](#)
- [Pointers to significant directories and archives of online texts](#)
- [Special exhibits of particularly interesting classes of online books](#)
- [Information on how readers can help support the growth of online books](#)

**Virtual Computer Library (<https://webcms.utexas.edu/vcl/index.html>)**: It gives links to resources on Computers and Information Technology.

**Internet Public Library (<http://www.ipl.org/>)**: It contains directories of online texts, newspapers, magazines, and other reference materials.

**KnowGenesis (<http://www.knowgenesis.org.tc>)**: It is an online library for technical communications and research writings.

**Project Gutenberg (<http://www.projectgutenberg.org>)**: Project Gutenberg is the first and largest single collection of free electronic books, or eBooks. Michael Hart, founder of Project Gutenberg, invented eBooks in 1971 and continues to inspire the creation of eBooks and related technologies today.

**The Free Library (<http://www.thefreelibrary.com/>)**: It has a good collection of books by well known authors. It also provides a short write up on the importance of a particular day in history.

**Free Management Library (<http://www.managementhelp.org>)**: It has grown to be one of the world's largest well organized collections of resources on leadership and other management issues.

**Virtual Information Centre** ([http://www.vic-ikp.info/vic\\_new/index.asp](http://www.vic-ikp.info/vic_new/index.asp)): ICICI Knowledge Park, Bangalore has set up a VIC to provide access to digital resources of member partners. K-Library is a part of VIC. It covers four domains namely Biotechnology, Networking and Telecommunication, Pharmaceutical Sciences and Material Science. Resource coverage includes Electronic Journals and Newsletters, Books, Discussion Forum, Conferences, Portals, Preprints and e-prints, Science and Research News etc.

**SunSite India** (<http://sunsite.serc.iisc.ernet.in/virlib>): The SunSITE India is a joint initiative of the Indian Institute of Science and Sun Microsystems. A large public software archive is maintained on SunSITE India server.

**e-Gate** (<http://www.drdo.org/egate/index.html>): It is a part of Defense Research and Development Organization, a Government of India undertaking. The e-Gate provides links on resources for Aerospace, Chemistry, Computers, Electronics, Academic, Defense, Research and General. It also has a listing of various search engines, newspapers and patents.

**IUCAA** (<http://www.iucaa.ernet.in/~library/>): IUCAA library is one of the most advanced modern libraries specializing in Astronomy and Astrophysics in India.

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